



1/8

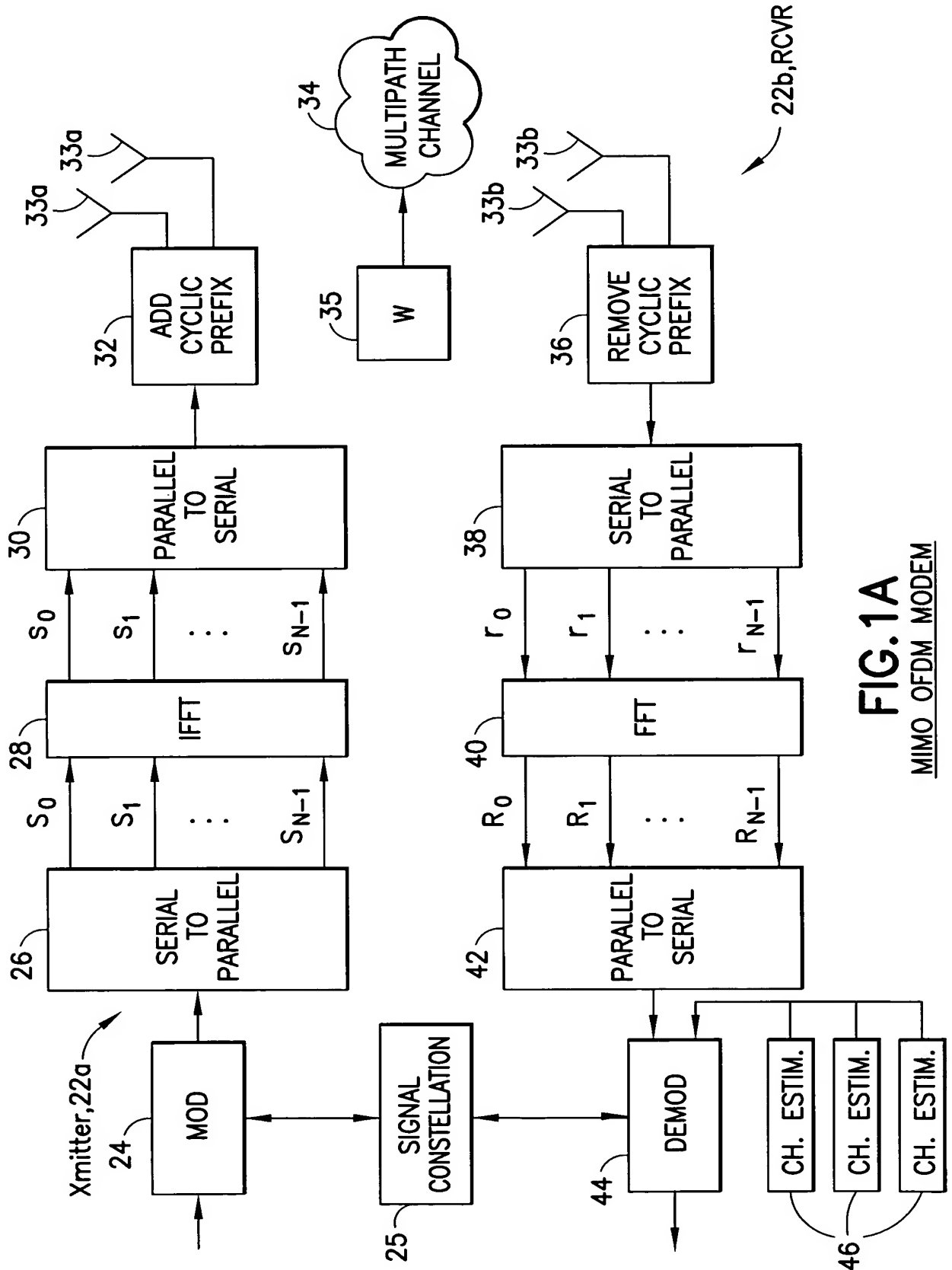


FIG. 1A
 MIMO OFDM MODEM

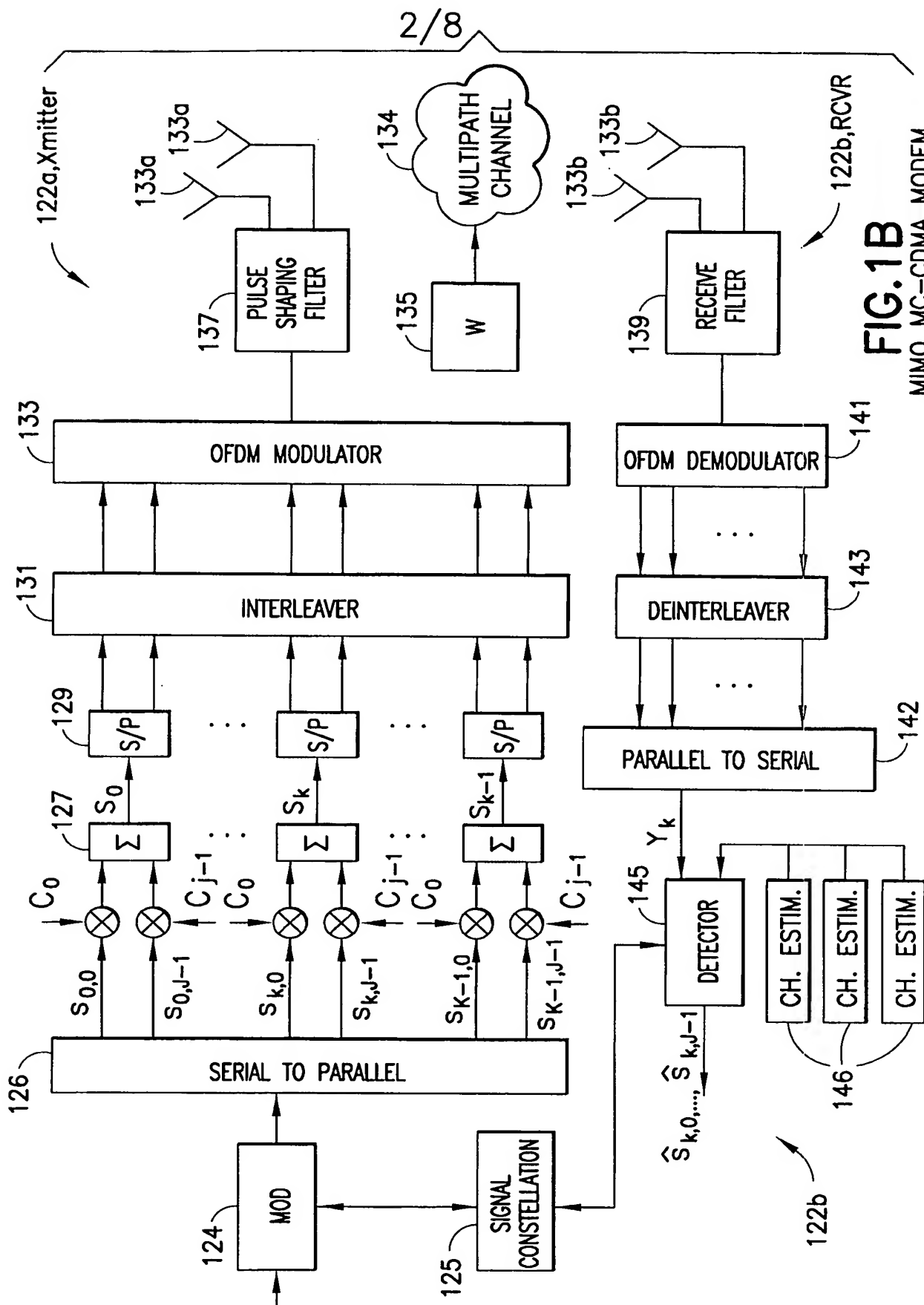


FIG. 1B
 MIMO MC-CDMA MODEM

3/8

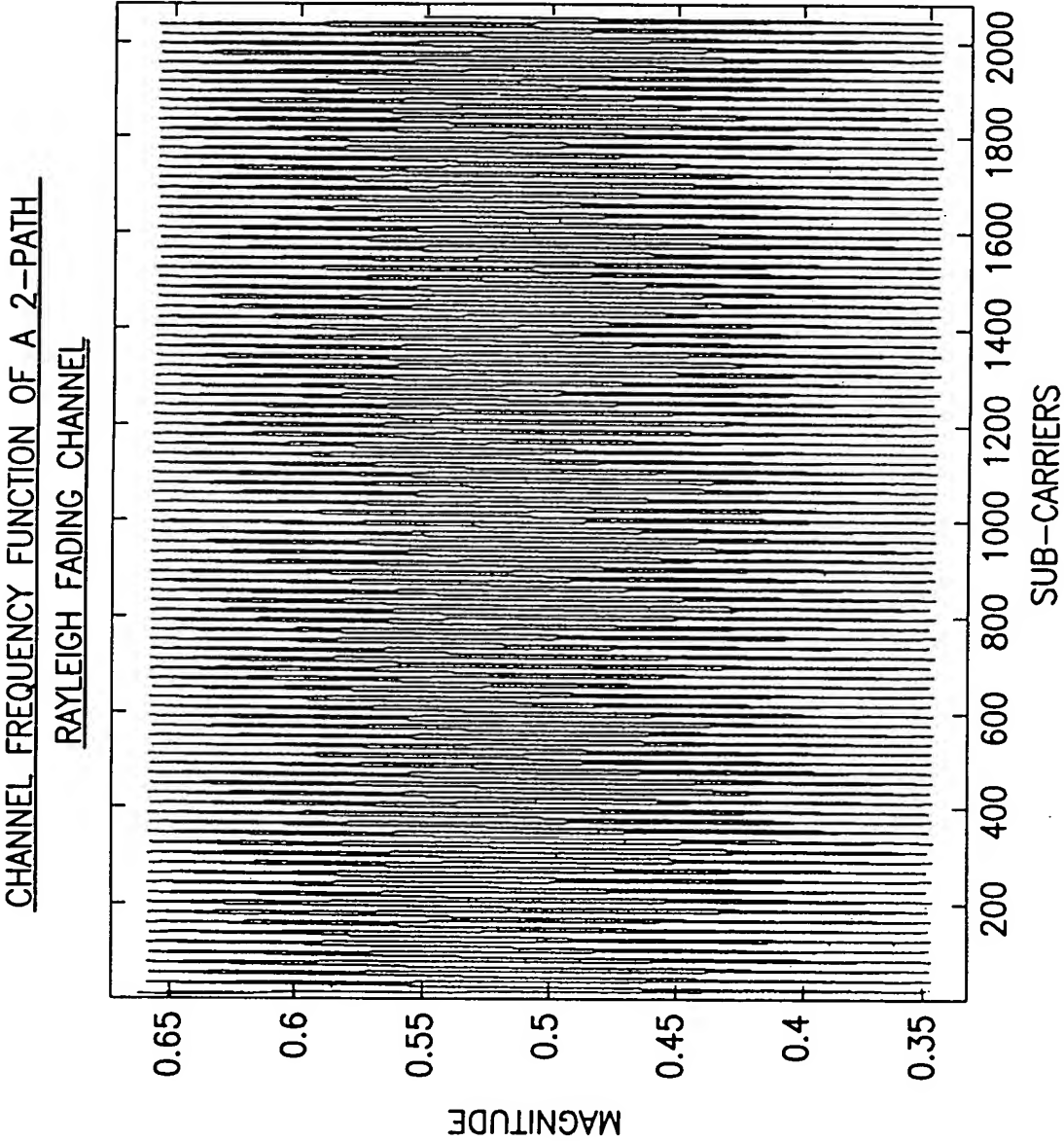


FIG.2
PRIOR ART

4/8

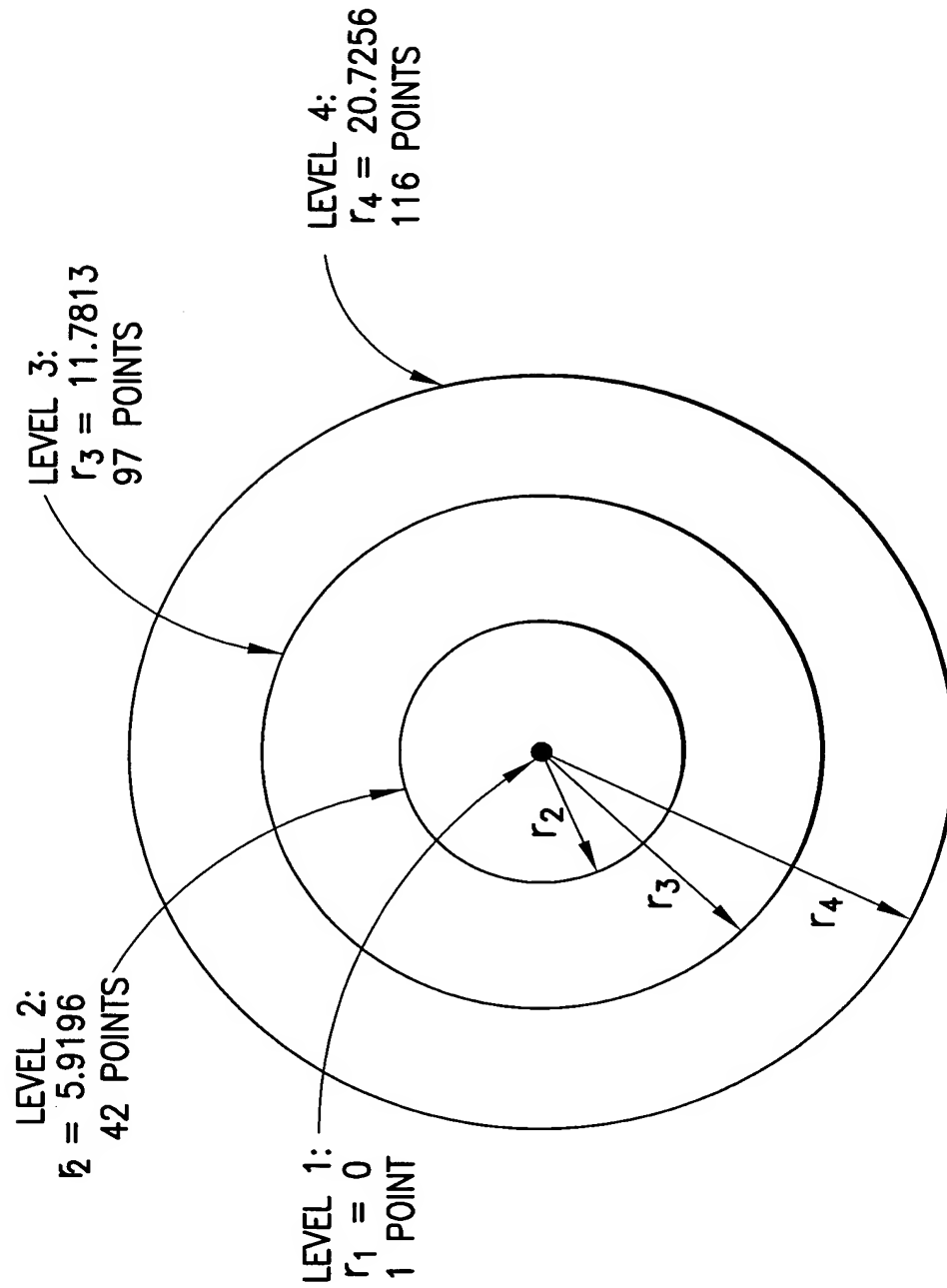


FIG.3

2x2, 1 C, 128 SC, 16QAM, SF 4, 1 UpB, 8 PILOTS, Ppilot =1.0,
OFl, No P SF, 4 SpC, 20 CP, BLOCK Veh A, 5-TAP LS

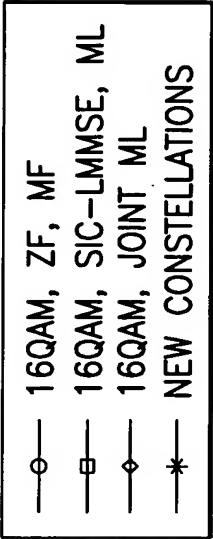
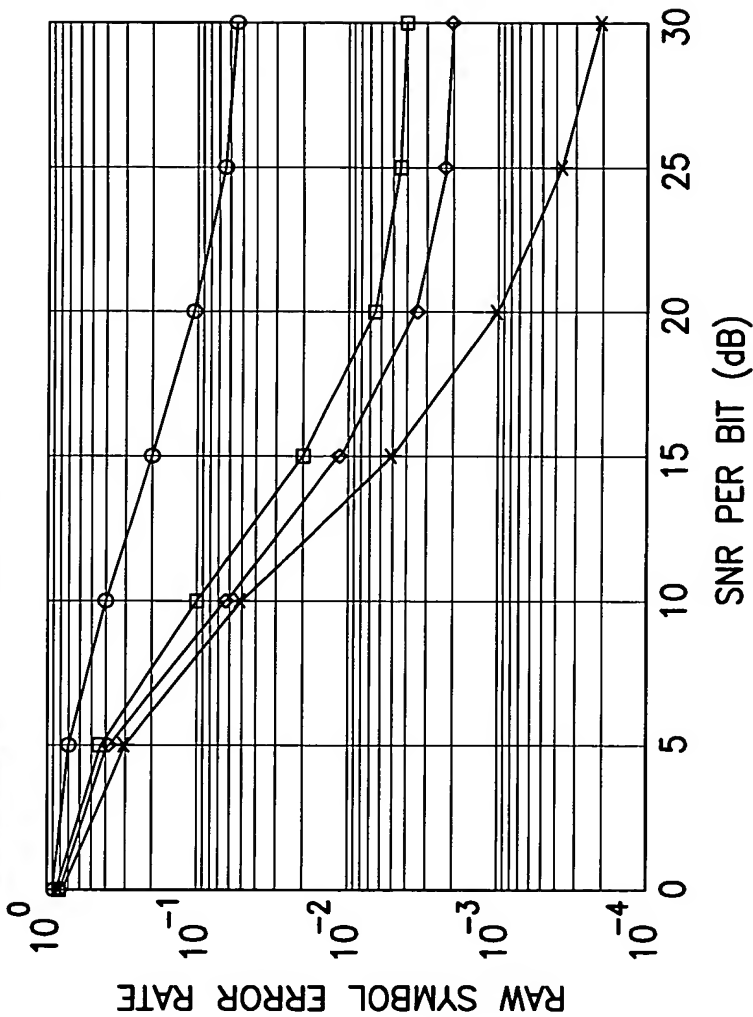
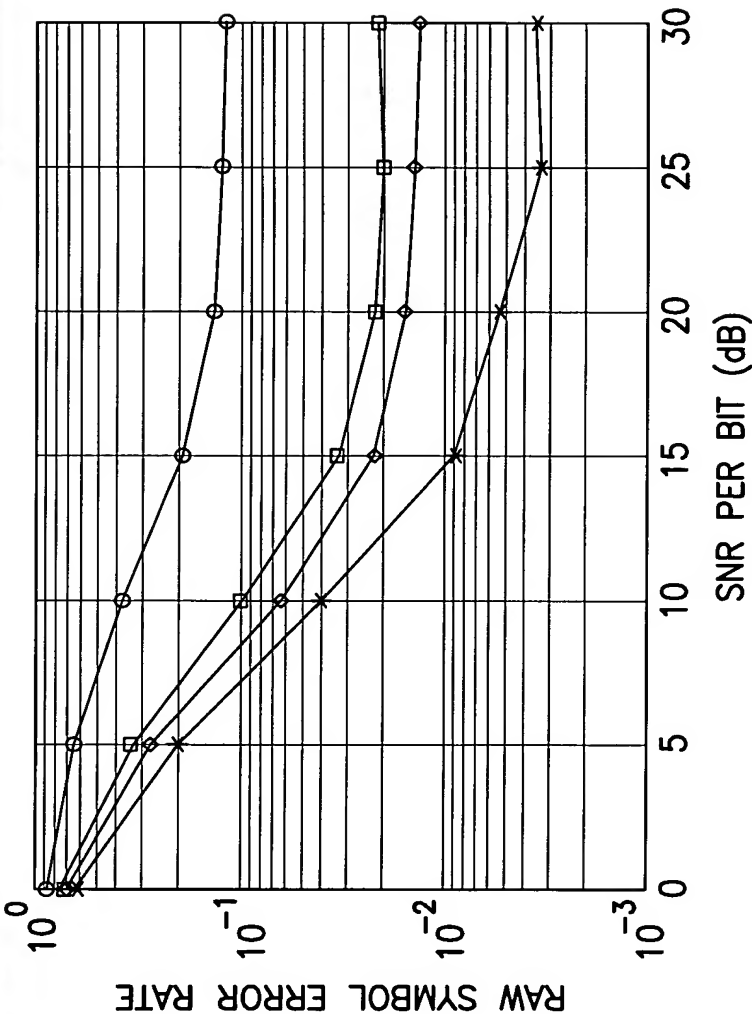


FIG.4A

2x2, 1 C, 128 SC, 16QAM, SF 4, 1 UpB, 8 PILOTS, Ppilot =1.0,
OFl, No P SF, 4 SpC, 20 CP, Veh A, 120.0 Km/h, 5-TAP LS



- 16QAM, ZF, MF
- 16QAM, SIC-LMMSE, ML
- ◇— 16QAM, JOINT ML
- *— NEW CONSTELLATIONS

FIG.4B

7/8

2x2, 1 C, 128 SC, 16QAM, PURE OFDM, 8 PILOTS, Ppilot =1.0,
 OFI, No P SF, 4 SpC, 20 CP, BLOCK Veh A, 5-TAP LS

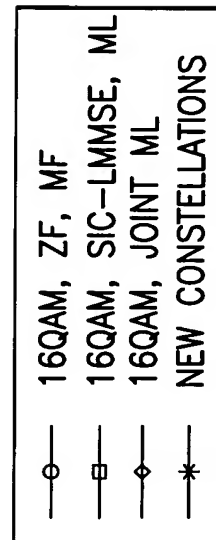
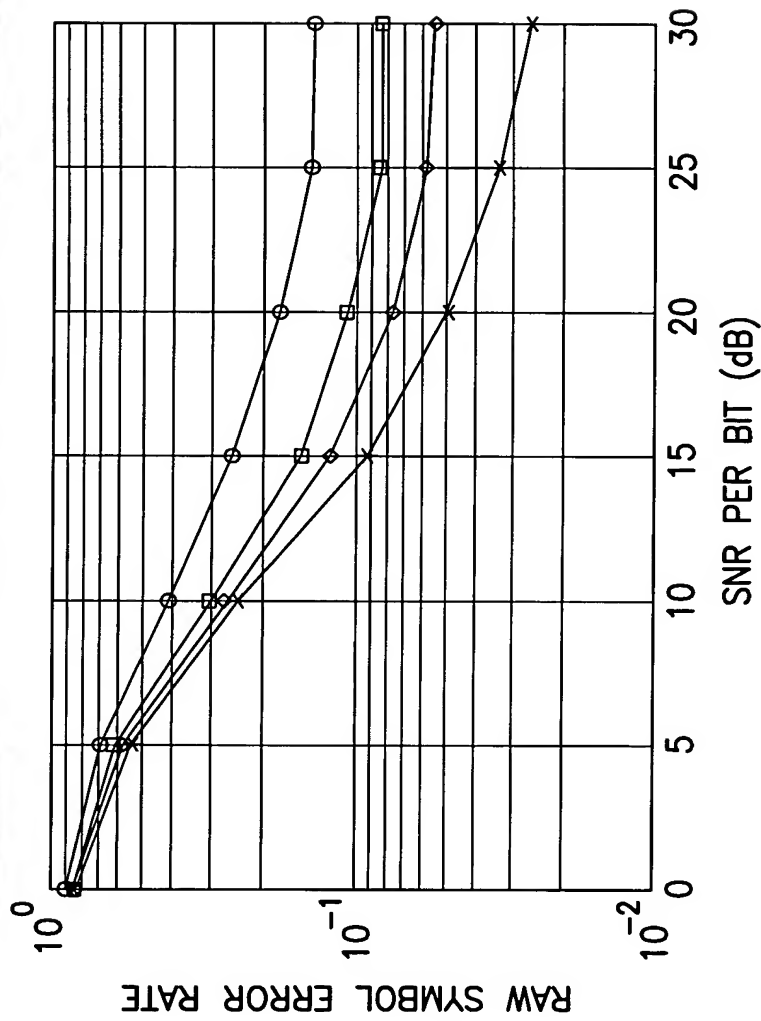


FIG.5A

8/8

2x2, 1 C, 128 SC, 16QAM, PURE OFDM, 8 PILOTS, Ppilot =1.0
 OFL, No P SF, 4 SpC, 20 CP, Veh A, 120.0 Km/h, 5-TAP LS

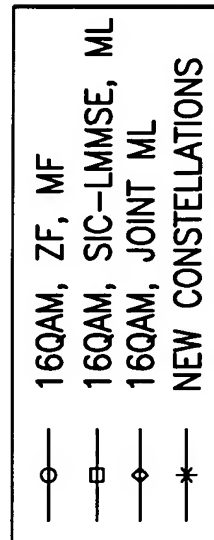
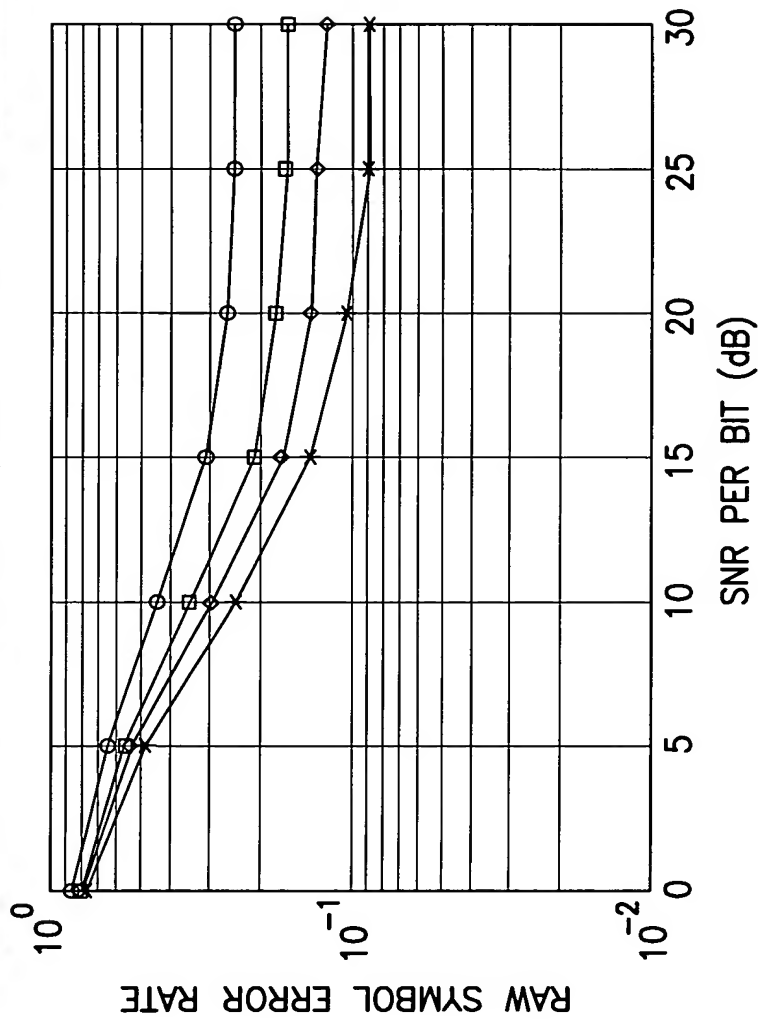


FIG.5B